



Dear Resident,

The Town of Poolesville is pleased to inform you that once again Poolesville's drinking water meets or exceeds the U.S. Environmental Protection Agency (EPA) standards for safety and quality.

Poolesville delivers a safe and reliable water supply to approximately 5,300 residents and several businesses. The system consists of about eighteen miles of ductile iron water pipe and two storage tanks. A 500,000-gallon elevated storage tank is located near the High School and a 1,000,000-gallon standpipe is located in the Woods of Tama.

This report includes details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Each year, we test the water for several different contaminants. Many of these tests did not detect even a trace amount of contaminants in our water. This report shows only the detectable results of our monitoring for the period of January 1 – December 31, 2013. The report is not published until June as the final analysis and MDE review must occur prior to release.

We hope that you find the information in this Water Quality Report useful in illustrating our commitment to provide our community with a safe and reliable water supply.

For more information, you may contact me at 301-428-8927 or attend a Commissioner's meeting every first and third Monday at Poolesville Town Hall, 19721 Beall Street.

Sincerely,

D. Wade Yost  
Town Manager

## Important health information from the U.S. EPA

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than others. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from any source from their health care providers.

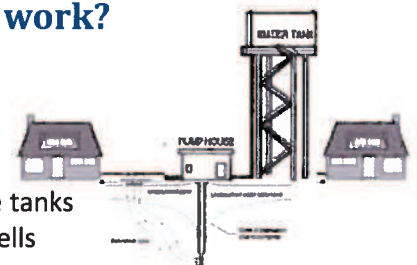
EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available by calling the Safe Water Drinking Hotline: 800-426-4791 or by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

## Poolesville's water source

Poolesville relies entirely upon groundwater to supply residents and businesses. Water is withdrawn from twelve wells located throughout Town. State permits allow an annual average daily withdrawal of 650,000 gallons per day (GPD) and a maximum monthly average of 910,000 GPD. These wells are drilled from 285 to 800 feet deep into the New Oxford Formation Aquifer. Groundwater is derived from rainwater, creek and riverbed percolation. As the water travels downward through the soils, many of the impurities are removed. This results in water that is usually clean enough to drink without any treatment. Our groundwater quality is very good and requires chlorine treatment, as mandated by the Safe Water Drinking Act. In comparison, surface water as found in most municipalities around us, must contend with pollution, algae blooms and wastewater discharges from upstream users.

## How does our water system work?

The operation of our system is based on the water level in the water tanks, which provide the water pressure for your home. When the water level in the tanks drops to a preset elevation, all twelve wells



are automatically turned on. The wells pump water into our distribution pipes and to the water tanks. Once the water tanks are full, the wells shut down. This process takes about 8 to 12 hours depending on the actual use during the filling process. Many residents have wells located near their homes, but for the most part, everyone receives a blended mix of water from each of the wells.

# Water Quality Data

## Detected Regulated Contaminants

Substances	Violation?	Customer Tap		MCLG	AL	Major Sources in Drinking Water
		Level	Unit			
Lead (ppb)	No	0	ppm	0	AL=15	Corrosion of household plumbing systems
Copper (ppm)	No	0.68	ppm	1.3	AL=1.3	Corrosion of household plumbing systems
Substances	Violation?	Distribution System		MCLG or (MRDLG)	MCL or (MRDL)	Major Sources in Drinking Water
		Level	Units			
Residual Chlorine	No	0.9	Mg/L	4	4	Water additive used to control microbes
Trihalomethanes	No	10.89	ug/L	0.06	80	Disinfection byproduct
Haloacetic acids	No	2.65	ug/L	0.3	60	Disinfection byproduct
Coliform Bacteria	No	0	mg/L			Naturally present in the environment

Substances	Violation?	Level Detected Well #										MCLG	MCL	Major Sources in Drinking Water
		2	3	4	5	6	7	8	9/10	11	12	Units		

## Disinfection Byproducts (Total MCLG .06, total MCL 80 ug/L)

Chloroform	No	.8	.5		.5							ug/L		80	
Chloromethane	No			1.3	.6	.8			.6	1.4	1	ug/L		80	
Bromodichloromethane	No	.7										ug/L		80	
Dibromochloromethane	No	1.1										ug/L		80	

## Radionuclides

Beta emitters	No		4	4.3		1.5	4.9	4.1	4.6	3.9	.13	pCi/L	0	50	Decay of natural and man-made deposits
Alpha emitters (Adjusted)	No	9.6	4	10.8	2.3	5.7	1.5	11.4	1.8	15	6.1	pCi/L	0	15	Erosion of natural deposits
Combined radium	No	0.4	0.3		.2	2.2	1.2	1	1.4	1.7	2.2	pCi/L	0	5	Same as above
Uranium	No	4.7	3.6		4.7	14.2		4.7	8.5	11.9	14.6	ug/L	0	30	Same as above

## Inorganics

Barium	No	.28	.17	.31	.12	.97	.58	.89	.63	.01		ppm	2	2	Discharge from drilling wastes; Erosion of natural deposits.
Chromium	No				.004							ppm	.1	.1	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	No				.5	.5	.3	.3	.3			ppm	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Nitrate	No	4.1	5.5	5.7	4.3	2.4	1.1	2.8	1.1	4.9	3	ppm	10	10	Runoff from fertilizer; leaching from septic tanks, sewage, erosion of natural deposits.
Arsenic	No	.002			.001	.002	.005					ppm	0	.01	Erosion of natural deposits; Runoff from orchards glass and electronic production wastes.

## Synthetic Organics

Di(2-ethylhexl phthalate	No									.004		ug/L	0	6	Discharge from rubber and chemical factories
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## Detected Unregulated Contaminants

Sodium	No	21	18	27	16	18	24.3	19.6	23.1	11.9	11.8	ppm	n/a	n/a	Erosion of natural deposits
Nickel	No	.004			.002	.002	.002					ppm	n/a	n/a	Same as above
Radon	No	395	967	650	1590	1314	2875	1727	1930	981	801	pCi/L	n/a	n/a	Same as above
Butachlor	No	.51										ug/L	n/a	n/a	Pesticide runoff



## Definitions Used in this Report

PPM or MG/L	Parts per million, or milligrams per liter (mg/L). 1 ppm is the same as one drop in 10 gallons of water
PPB	Parts per billion, or micrograms per liter (µg/L). 1 ppb is the same as one drop in 10,000 gallons of water.
ND	Not detected (by a test procedure)
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which no health risk is known or expected. MCLGs ensure a margin of safety for sensitive individuals.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
AL	Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

### Why are contaminants in my drinking water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity, including:

- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities;
- Microbial contaminants, such as viruses and bacteria, that may come from wastewater treatment plants, septic systems, agricultural livestock operations and wildlife;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses; and
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Is my water hard?

Poolesville water tends to be hard (averaging about 15 grains) due to calcium carbonate.

### Is my water fluoridated?

No, with 12 different points of entry into the system, control of the chemicals and overall costs make it prohibitive. Parents of young children may want to consult their dentist about the need for fluoride to prevent tooth decay.

### The MDE requires certain health effects language for some contaminants even though a violation may not exist.

- **Nitrate:** Infants who drink water containing nitrates in excess of the MCL could become seriously ill and, if not treated, may die. Symptoms include shortness of breath and blue baby syndrome.
- **Radon:** Radon has been detected in all samples tested. There is no Federal regulation for drinking water. However, exposure to air transmitted radon over a long period of time may cause adverse health effects.
- **Alpha Emitters: (Uranium, Radium)** Alpha Emitters have the potential to cause an increased risk of cancer if consumed in excess of the MCL over a lifetime.

In order to ensure that tap water is safe to drink, the USEPA and Maryland Department of the Environment (MDE) impose testing requirements and regulations that limit the amount of certain contaminants in water provided by public water systems. Although Poolesville in conjunction with the MDE sample for several different contaminants, only those present are listed in the following tables. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The MDE requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Additional information for lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Poolesville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).